

Notice of Allowability

Application No.

10/825,719

Applicant(s)

MO ET AL.

Examiner

Art Unit

Jaworski Francis J.

3737

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to amdt,ids1-19-05.
2. ☒ The allowed claim(s) is/are 1-36.
3. ☒ The drawings filed on 16 April 2004 are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.


Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- | | |
|---|--|
| 1. <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 5. <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 6. <input type="checkbox"/> Interview Summary (PTO-413),
Paper No./Mail Date _____. |
| 3. <input checked="" type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08),
Paper No./Mail Date <u>1-19-05</u> | 7. <input checked="" type="checkbox"/> Examiner's Amendment/Comment |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit
of Biological Material | 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance |
| | 9. <input type="checkbox"/> Other _____. |


Francis J. Jaworski
Primary Examiner

EXAMINER'S AMENDMENT

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Susan Yee, Reg. No.41,388 on August 19, 2005.

The application has been amended as follows:

In Claim 2 line 1 "filtering is performed" has been deleted in favor of : -- processor is configured for selecting said optimal high pass filter for performing filtering --

In Claim 3 " a criterion for selecting " has been deleted in favor of -- the processor is configured to select --

In Claim 4 " a criterion for selecting " has been deleted in favor of -- the processor is configured to select --

In Claim 5 the language " a criterion for selecting " has been deleted in favor of - - the processor is configured to select --.

In Claim 6 "filtering is performed " has been deleted in favor of -- processor is configured for selecting said optimal high pass filter for performing filtering --.

In each of claims 10, 11 and 12 " a criterion for selecting " has been deleted in favor of -- the processor is further configured to select --, and thereafter the language " further comprises " has been deleted.

In each of claims 13 and 14 the language " is performed " has been deleted in favor of -- high pass filter is configured to perform --.

In each of claims 33 and 34 in line 1 only, before " number " "infinite " has been changed to -- finite --.


The terminology "select an optimal high pass filter" in the base claims 1 and 9 is understood to be generic to both the configuration by selection of operational parameters of a filter as well as the selection of discrete filters as for example is claimed in claim 7.

The following is an examiner's statement of reasons for allowance: In addition to the art of record, Mo et al (US6296612) is directed to non-iterative wall filter coefficient selection based upon the mean and variance of the clutter frequency, and (US5961461) to adaptive high pass filter weighting for B-mode enhancement. Huebscher et al (US4324258) is directed to recursive loop filtering of clutter by subtracting stationary or near stationary Doppler signals. None of the prior art alone or in combination teaches iterative determination of high pass clutter selection based upon magnitude and mean frequency of the ultrasound colorflow data signal or upon the recited filtered data autocorrelation relationship using the original colorflow data for the iterations..

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Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Any inquiry concerning this communication should be directed to Jaworski Francis J. at telephone number 571-272-4738.



Francis J. Jaworski
Primary Examiner

FJJ:fjj

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